## *Remarks*

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendment, claims 1, 2, 4-17, 19-21, 23-31 and 33-35 are pending in the application, with claims 1, 15, 20, 29, 33, 34 and 35 being the independent claims. Claims 1, 6, 15, 16, 33, and 34 are sought to be amended to correct for minor informalities. These changes should be entered after final as they raise no new issues and pose no new search requirement by the Examiner, and the changes place the application in condition for allowance and/or in better condition for appeal. Applicant believes these changes do not change the scope of the claims, and are only made to clarify the features already recited in the claims. These changes are believed to introduce no new matter, and their entry is respectfully requested.

The claims presented in this Application should be interpreted solely based on the file history of this Application, not the file history of any predecessor or related application. With respect to this application, Applicant hereby rescinds any and all disclaimers of claim scope made in any parent application(s), any predecessor application(s), and any related application(s). The Examiner is advised that any previous disclaimer of claim scope, if any, and any references that allegedly caused any previous disclaimer of claim scope, may need to be revisited. Nor should any previous disclaimer of claim scope, if any, in this Application be read back into any predecessor or related application.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

***Rejections Under 35 U.S.C. § 102***

Claims 1, 2, 4-8, 15-17, 29-31, 33, and 34

Claims 1, 2, 4-8, 15-17, 29-31, 33, and 34 stand rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by United States Patent No. 5,864,579 to Briskman ("Briskman"). Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

Briskman does not expressly or inherently teach or suggest each and every feature of independent claim 1

The Examiner, in the Office Action, alleges column 2, lines 53-65, of Briskman teaches or suggests at least the feature of "*determining within the plurality of repeaters whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively will create interference between the first and second packets*" as recited by independent claim 1. This passage of Briskman provides:

> [t]here may be more than one terrestrial repeater, more than one geosynchronous satellites, or both, in a core urban area transmitting the same signal. Because these transmissions are at the same radio frequency, a user receiver preferably includes means for minimizing self-interference among a plurality of incoming transmissions. This is particularly difficult since the transmissions can arrive at the user receivers with random phase with respect to each other and with widely differing signal amplitudes.
>
> (Briskman, 2:53-65.)

It is evident from the above cited passage of Briskman, there is ***no express teaching or suggestion*** that the one terrestrial repeater and/or the more than one geosynchronous satellites of Briskman ***determines*** "*whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively will create interference between the first and second packets.*" Rather, this passage of Briskman

merely discloses the concept of self-interference, namely transmissions between two devices, such as transmissions between the one terrestrial repeater and the user receiver of Briskman, in a wireless network resulting in unwanted signals being received by other user receivers.

Applicant does not dispute the fact that transmissions between two devices in a wireless network may result in interference. However, independent claim 1 makes an explicit determination or detection of whether interference will occur before packets are allowed to be transmitted over the wireless network. For example, the plurality of repeaters of independent claim 1 detect that there "may be one or more transmissions performed by one or more repeaters that would cause interference that prevents the packets from being received by the intended mobile station." (Specification, ¶ [00196].) If the plurality of repeaters determine that the transmissions would cause interference, then the plurality of repeaters may wait for a period of time to allow the communication channel to clear. (Specification, ¶ [00196].)

Nowhere does Briskman teach or suggest making such a determination of whether an interference problem would be created before transmission of packets as recited by independent claim 1. Rather, Briskman discloses the "use of spread spectrum modulation where several such transmissions, each encoded with different orthogonal pseudo-noise codes, can occupy the same spectrum and be demodulated at the user receiver without self-interference." (Briskman, 2:65-3:3.) In particular, "two or more such transmissions can be encoded orthogonally to each other, transmitted at the same radio frequency and, when demodulated in a properly designed receiver, the desired

transmission is fully recovered while the undesired transmissions are noiselike." (Briskman, 6:45-49.) For example, according to Briskman,

> [o]ne spread spectrum transmission, say from a satellite, has a certain pseudo-noise code. A second spread spectrum transmission from a terrestrial repeater such as shown in FIG. 2 has a pseudo-noise code which is orthogonal. A spread spectrum demodulator receiving a desired (i.e., pre-determined) pseudo-noise code will sense an orthogonal code as quasi-random noise.
>
> (Briskman, 7:63-8:3.)

Briskman, therefore, has no need to determine "*whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively will create interference between the first and second packets*" as recited by independent claim 1. Rather, Briskman relies on intrinsic properties of the orthogonal pseudo-noise code to mitigate such interference without explicitly determining whether such interference will be created before transmission of each packet.

Use of Official Notice in a rejection under 35 U.S.C. 102(b) is improper.

Applicant respectfully reminds the Examiner that "[a] claim is anticipated only if each and every element as set forth in the claim is found, ***either expressly or inherently described***, in a single prior art reference." (M.P.E.P. ¶ 2131.) The Examiner, in the Office Action, "asserts that it is well known in the art that transmitting two or more signals at the same time can cause interference." (Office Action, p. 2.) However, this use of Official Notice of a well known fact takes into account facts that not expressly or inherently described in Briskman. Therefore, the Official Notice of the well known fact taken by the Examiner is improper for an anticipatory rejection under 35 U.S.C. 102(b).

In summary, Briskman does not teach or suggest at least the features of "determining within the plurality of repeaters whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively, will create interference between the first and second packets" as recited by independent claim 1. Additionally, the Official Notice taken by the Examiner that this feature is well known is improper for an anticipatory rejection under 35 U.S.C. 102(b). Independent claims 1, 15, 29, 33, and 34 each recite substantially similar features that are likewise not taught or suggested by Briskman.

Additionally, in regards to independent claim 15, this independent claim 15 also recites at least the feature of "*receiving, at a switch, first and second data packets designated for transmission to a first mobile station and a second mobile station, respectively, via a plurality of repeaters transmitting on a substantially identical communication frequency.*" This feature of independent claim 15 clearly identifies the first and second data packets are "*designated for transmission to a first mobile station and a second mobile station , respectively, via a plurality of repeaters.*" However, the amplitude sensor switch of Briskman as shown in FIG. 3 is implemented as part of a broadcast receiver "for receiving... audio programs(s) at both fixed and mobile terminals." (Briskman, 7:52-54.) The transmissions received by the broadcast receiver of Briskman "are split into equal parts for demodulation." (Briskman, 7:61-63.) The outputs of these demodulators are compared using an amplitude sensor switch. (Briskman, 8:8-9.) The amplitude sensor switch of Briskman "outputs the stronger signal to a user's audio system. (i.e., the audio amplifier, multiplex program selector, speakers, headset, etc.)" (Briskman, 8:10-12.) The user's audio system are not mobile

stations nor is the output of the amplitude sensor switch "*designated for transmission to a first mobile station and a second mobile station, respectively, via a plurality of repeaters*" as recited by independent claim 15. Independent claim 35 recite substantially similar features that are likewise not taught or suggested by Briskman. Consequently, Briskman does not anticipate independent claims 1, 15, 34 and 35.

Dependent claims 2, 4-8, 16, 17, 30, 31 are likewise not anticipated by Briskman for the same reasons as the independent claims from which they depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 1, 2, 4-8, 15-17, 29-31, 33, and 34 under 35 U.S.C. § 102(b) be reconsidered and withdrawn.

***Rejections Under 35 U.S.C. § 103***

Claims 20, 21, 23-25, and 35

Claims 20, 21, 23-25, and 35 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Briskman. Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

From the discussion above, Briskman does not teach or suggest at least the feature of "*determining within the plurality of repeaters whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively, will create interference between the first and second packets*" as recited by independent claim 1. Independent claims 20 and 35 each recite substantially similar features that are likewise not taught or suggested by Briskman. For example, independent claim 20 recites at least the feature of "*determining, at the switch, whether immediately transmitting the packet to*

*the mobile station will cause an interference with other communications destined to the mobile station.*" Consequently, Briskman does not render independent claims 20 and 35 obvious. Dependent claims 21 and 23-25 are likewise not rendered obvious by Briskman for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features. Accordingly, Applicant respectfully requests that the rejection of claims 20, 21, 23-25, and 35 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

Claims 9-13, 14, 19, and 26-28

Claims 9-13, 14, 19, and 26-28 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Birskman in view of one or more of the following:

United States Patent No. 5,093,927 to Shanley ("Shanley"); and
United States Patent No. 5,732,076 to Ketseoglou et al. ("Ketseoglou").

Applicant respectfully traverses the rejection and provides the following arguments to support patentability.

As discussed above, Birskman does not teach or suggest each and every feature of independent claims 1, 15, 20, 29, 33, 34, and 35. Shanley and Ketseoglou alone, or any combination thereof, does not provide the missing teachings or suggestions with respect to these independent claims nor does the Office Action so allege. Therefore, the combination of Birskman and one or more of Shanley and Ketseoglou does not render independent claims 1, 15, 20, 29, 33, 34, and 35 obvious. Dependent claims 9-13, 14, 19, and 26-28 are likewise not rendered obvious by the combination of Birskman and one or more of Shanley and Ketseoglou for the same reasons as the independent claims from which they respectively depend and further in view of their own respective features.

Accordingly, Applicant respectfully requests that the rejection of claims 9-13, 14, 19, and 26-28 under 35 U.S.C. § 103(a) be reconsidered and withdrawn.

***Request Pursuant to MPEP § 706.07(d) to Withdraw Finality of Office Action***

Applicant requests reconsideration of the finality of the rejection of the Office Action dated April 28, 2009 ("Final Office Action") and the Supplemental Office Action dated May 13, 2010 ("Supplemental Final Office Action"). The Examiner states that these two Office Actions are made final in accordance with M.P.E.P. § 706.07(a). (Final Office Action, p. 14; Supplemental Final Office Action, p. 15). According to M.P.E.P. § 706.07(a),

> [u]nder present practice, second or subsequent actions on the merits can be made final, ***except*** where the Examiner introduces a new ground of rejection that is neither necessitated by the Applicants' amendment of the claims nor based on information submitted in an information disclosure statement filed during the period set forth in 37 C.F.R. § 1.97(c).
>
> M.P.E.P. § 706.07(a) (emphasis added)

Here, Applicant respectfully asserts that the Examiner introduced a new ground of rejection in the Office Final Action and the Supplemental Final Office Action that is neither necessitated by the Applicant's amendment of the claims nor based on information submitted in an information disclosure statement. Therefore, the finality of these Office Actions was premature.

In an Amendment and Reply Under 37 C.F.R. § 1.111 filed on March 17, 2010 ("Non-Final Reply") in response to a Office Action dated December 17, 2009 ("Non-Final Office Action"), Applicant presented arguments that Briskman does not teach or suggest each and every element of independent claims 1, 15, 29, 33, and 34 as required

under 35 U.S.C. § 102(b). (*See*, Non-Final Reply, pp. 13-15). Specifically, Applicant argued that Briskman does not teach or suggest at least the feature of "*determining within the plurality of repeaters whether wirelessly transmitting first and second packets to the first and second mobile stations, respectively will create interference between the first and second packets*" as recited by independent claim 1." (Non-Final Reply, p. 13). Applicant additionally argued that Briskman does not teach or suggest each and every element of independent claims 20 and 35 as required under 35 U.S.C. § 103(a). No amendments were made to independent claims 1, 15, 20, 29, 33, 34, and 35 in the Non-Final Reply.

The Examiner, for the first time, alleges that the elements of independent claims 1, 15, 20, 29, 33, 34, and 35 that are missing from the references cited in the Non-Final Office Action are well known in the art. In particular, the Examiner "asserts that it is well known in the art that transmitting two or more signals at the same time can cause interference." (Final Office Action, p. 2; Supplemental Final Office Action, p. 2). Additionally, the Examiner, for the first time, cites to United States Patent No. 4,435,804 to Tan ("Tan") and United States Patent No. 6,862,265 to Appala et al. ("Appala") in support of this allegation. To the best of Applicant's knowledge, these references have not been submitted in an information disclosure statement filed during the period set forth in 37 C.F.R. § 1.97(c).

The Official Notice taken by the Examiner that a fact is well known constitutes a new ground of rejection that was not necessitated by Applicant's amendment nor based on information submitted in an information disclosure statement filed during the period set forth in 37 C.F.R. § 1.97(c). Therefore, the finality of the Office Final Action and the

Supplemental Final Office Action was premature. Applicant should be afforded the opportunity to evaluate the Examiner's Official Notice, as well as the Tan and Appala references, under 37 C.F.R. § 1.111.

## *Conclusion*

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment and Reply is respectfully requested.

Respectfully submitted,

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